



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/756,756	01/14/2004	Hajime Kimura	12732-207001 / US6910	1526

26171 7590 02/08/2006

FISH & RICHARDSON P.C.  
P.O. BOX 1022  
MINNEAPOLIS, MN 55440-1022

EXAMINER
----------

PIZIALI, JEFFREY J

ART UNIT	PAPER NUMBER
----------	--------------

2673

DATE MAILED: 02/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/756,756

Applicant(s)

KIMURA ET AL.

Examiner

Jeff Piziali

Art Unit

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-78 and 80 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-78 and 80 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Election/Restrictions***

2. This application contains claims directed to the following patentably distinct species, sub-species, and sub-sub-species of the claimed invention:

Species 1, drawn to the current source circuit of "Embodiment Mode 1" (see fig. 1 and pages 5-9 of the specification), comprising:

Sub-Species A, drawn to one type of changing over circuit (see fig. 1(A) and pages 5 of the specification),

Sub-Species B, drawn to an alternate type of changing over circuit (see fig. 1(B) and pages 5-6 of the specification), and

Sub-Species C, drawn to using a plurality of current sources for each output line (see fig. 2 and pages 6-9 of the specification);

Species 2, drawn to the circuit configuration of a power supply according to

"Embodiment Mode 2" (see figs. 3-4 and pages 9-13 of the specification), comprising:

Sub-Species A, drawn to one circuit configuration (see fig. 3(A) and pages 9-10 of the specification),

Sub-Species B, drawn to an alternate circuit configuration (see fig. 3(B) and pages 10-11 of the specification),

Sub-Species C, drawn to an alternate circuit configuration (see fig. 3(C) and pages 11-12 of the specification),

Sub-Species D, drawn to an alternate circuit configuration (see fig. 3(D) and page 12 of the specification),

Sub-Species E, drawn to an alternate circuit configuration (see fig. 3(E) and page 12 of the specification),

Sub-Species F, drawn to an alternate circuit configuration (see fig. 4(A) and page 13 of the specification),

Sub-Species G, drawn to an alternate circuit configuration (see fig. 4(B) and page 13 of the specification),

Sub-Species H, drawn to an alternate circuit configuration (see fig. 4(C) and page 13 of the specification), and

Sub-Species I, drawn to an alternate circuit configuration (see fig. 4(D) and page 13 of the specification);

Species 3, drawn to the signal line driver circuit of "Embodiment Mode 3" (see fig. 5 and pages 13-16 of the specification), comprising:

Sub-Species A, drawn to one signal line driver circuit configuration (see fig. 5(A) and pages 13-16 of the specification), and

Sub-Species B, drawn to an alternate signal line driver circuit configuration (see fig. 5(B) and page 16 of the specification);

Species 4, drawn to the signal line driver circuit of "Embodiment Mode 4" (see fig. 6 and pages 16-18 of the specification), comprising:

Sub-Species A, drawn to one signal line driver circuit configuration (see fig. 6(A) and pages 16-17 of the specification), and

Sub-Species B, drawn to an alternate signal line driver circuit configuration (see fig. 6(B) and pages 17-18 of the specification);

Species 5, drawn to the signal line driver circuit of "Embodiment Mode 5" (see fig. 7 and pages 18-19 of the specification), comprising:

Sub-Species A, drawn to one signal line driver circuit configuration (see fig. 7(A) and pages 18-19 of the specification), and

Sub-Species B, drawn to an alternate signal line driver circuit configuration (see fig. 7(B) and page 19 of the specification);

Species 6, drawn to the signal line driver circuit of "Embodiment Mode 6" (see fig. 8 and pages 19-21 of the specification);

Species 7, drawn to the signal line driver circuit of "Embodiment Mode 7" (see fig. 9 and pages 21-22 of the specification);

Species 8, drawn to the signal line driver circuit of "Embodiment Mode 8" (see fig. 10 and pages 22-24 of the specification), comprising:

Sub-Species A, drawn to one signal line driver circuit configuration (see fig. 10(A) and pages 22-23 of the specification), and

Sub-Species B, drawn to an alternate signal line driver circuit configuration (see fig. 10(B) and page 24 of the specification);

Species 9, drawn to the changing over circuitry of "Embodiment Mode 9" (see figs. 11-12 and pages 24-25 of the specification), comprising:

Sub-Species A, drawn to a change over timing method (see fig. 11 and page 24 of the specification), and

Sub-Species B, drawn to a changing over circuit (see fig. 12 and pages 24-25 of the specification);

Species 10, drawn to the signal line driver circuit of "Embodiment Mode 10" (see fig. 13 and pages 25-26 of the specification);

Species 11, drawn to the full frame timing method of "Embodiment Mode 11" (see fig. 14 and pages 26-28 of the specification);

Species 12, drawn to the subframe timing method of "Embodiment Mode 12" (see fig. 15 and pages 28-30 of the specification), comprising:

Sub-Species A, drawn to one signal input line timing method (see fig. 15(B) and pages 28-29 of the specification), and

Sub-Species B, drawn to an alternate signal input line timing method (see fig. 15(B)' and page 29 of the specification), each separately comprising:

Sub-Sub-Species a, drawn to one set operation timing method (see fig. 15(C) and page 29 of the specification), and

Sub-Sub-Species b, drawn to an alternate set operation timing method (see fig. 15(C)' and pages 29-30 of the specification);

Species 13, drawn to the driving method of "Embodiment Mode 13" (see page 30 of the specification);

Art Unit: 2673

Species 14, drawn to the pixel circuit of "Embodiment Mode 14" (see fig. 16 and pages 30-33 of the specification), comprising:

Sub-Species A, drawn to one circuit configuration (see fig. 16(A) and pages 30-31 of the specification),

Sub-Species B, drawn to an alternate circuit configuration (see fig. 16(B) and pages 31-32 of the specification), and

Sub-Species C, drawn to an alternate circuit configuration (see fig. 16(C) and pages 32-33 of the specification);

Species 15, drawn to the structure of the light emitting device of "Embodiment 1" (see fig. 17 and pages 33-34 of the specification), comprising:

Sub-Species A, drawn to a light emitting device (see fig. 17(A) and page 33 of the specification), and

Sub-Species B, drawn to a scan line driver circuit configuration (see fig. 17(B) and pages 33-34 of the specification);

Species 16, drawn to performing a color display as described in "Embodiment 2" (see pages 34-35 of the specification); and

Species 17, drawn to the light emitting device of "Embodiment 3" (see fig. 18 and pages 35-37 of the specification), comprising:

Sub-Species A, drawn to a light emitting device (see fig. 18(A) and pages 35-36 of the specification),

Sub-Species B, drawn to a digital still camera (see fig. 18(B) and page 36 of the specification),

Art Unit: 2673

Sub-Species C, drawn to a notebook type personal computer (see fig. 18(C) and page 36 of the specification),

Sub-Species D, drawn to a mobile computer (see fig. 18(D) and page 36 of the specification),

Sub-Species E, drawn to a portable image reproducing apparatus (see fig. 18(E) and page 36 of the specification),

Sub-Species F, drawn to a goggle type display (see fig. 18(F) and page 36 of the specification),

Sub-Species G, drawn to a video camera (see fig. 18(G) and pages 18-19 of the specification), and

Sub-Species H, drawn to a portable phone (see fig. 18(H) and page 19 of the specification).

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species (and where applicable, sub-species and sub-sub-species) for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claims appear to be wholly generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the



Art Unit: 2673

limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Art Unit: 2673

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Piziali whose telephone number is (571) 272-7678. The examiner can normally be reached on Monday - Friday (6:30AM - 3PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on (571) 272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



J.P.  
30 January 2006



**BIPIN SHALWALA**  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600